| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/888,295 | 06/22/2001 | David A. Fotland | 20880-06031 | 9534 |

758          7590          06/01/2004

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| EXAMINER |
|---|
| MEONSKE, TONIA L |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2183 | 6 |

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _24 March 2004_.

2a)☐ This action is **FINAL.**     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _22 June 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance.  See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to.  See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _4 and 5_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

## DETAILED ACTION

### *Oath/Declaration*

1.      The oath or declaration is defective. A new oath or declaration in compliance with 37

CFR 1.67(a) identifying this application by application number and filing date is required. See

MPEP §§ 602.01 and 602.02.

2.      The oath or declaration is defective because:

   a.      It does not identify the city and either state or foreign country of residence of each

   inventor. The residence information may be provided on either an application data sheet

   or supplemental oath or declaration.

### *Specification*

3.      The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

### *Claim Rejections - 35 USC § 103*

4.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.      Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Intel Corporation,

Pentium Processor Family Developer's Manual, Volume 3: Architecture and Programming

Manual, 1995 (herein after Intel), in view of Case et al., US Patent 4,777,587.

6.      Intel has taught a method for performing arithmetic in a memory to memory architecture

in an embedded processor, the method comprising:

    a.    receiving an instruction (Intel, page 25-29) specifying a source address in a memory (Intel, page 25-29 and 25-11, r/m8, r/m16, r/m32), a source address in the register file (Intel, page 25-29 and 25-10, r8, r16, r32), a destination address in the memory (Intel, page 25-29 and 25-11, r/m8, r/m16, r/m32), and a mathematical operation to be performed (Intel, page 25-29, ADD instruction); and

    b.    responsive to receiving the instruction:

        i.    accessing, from the source address in the memory, a first operand on which the mathematical operation is to be performed (Intel, page 25-29 and 25-11, r/m8, r/m16, r/m32);

        ii.    accessing, from the source address in the register file, a second operand on which the mathematical operation is to be performed (Intel, page 25-29 and 25-10, r8, r16, r32);

        iii.    performing the mathematical operation on the first operand and the second operand to obtain the result (Intel, page 25-29, ADD instruction); and

    c.    storing the result in the destination address in the memory (Intel, page 25-29 and 25-11, r/m8, r/m16, r/m32).

7.    Intel has not specifically taught that the instruction is a fixed length instruction. Case et al. have taught that using fixed length instructions, or RISC (reduced instruction set computers) instructions, enables the instructions to be easily decoded (Case et al., column 1, lines 15-17). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the instructions of Intel be of a fixed-length, as taught by Case et al., for the desirable purpose of simplifying instruction decoding (Case et al., column 1, lines 15-17).

8.      Intel may not have specifically taught the following:

a.      the fixed length instruction is a <u>32-bit</u> fixed length instruction,

b.      specifying the source address in a memory using <u>11 bits</u>, a source address in the register file using <u>5 bits</u>, a destination address in the memory using <u>11 bits</u>, and a mathematical operation to be performed using <u>5 bits</u>.

9.      However, it as been held that change in size is not a patentable difference, *In re Rose, 105 USPQ 237 (CCPA 1955)*. Any length of the fixed-length instructions and any length of the claimed specifiers are not patentably distinct over the prior art.

10.     Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have:


a.      the fixed-length instruction be any number of bits, including 32 bits,

b.      specifying the source address in a memory using any number of bits, including <u>11 bits</u>, specifying a source address in the register file using an number of bits, including <u>5 bits</u>, specifying a destination address in the memory using any number of bits, including <u>11 bits</u>, and specifying a mathematical operation to be performed using any number of bits, including <u>5 bits,</u>


as it has been held that changes in size is not a patentable difference *In re Rose, 105 USPQ 237 (CCPA 1955)*.

*Conclusion*

11.     Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tonia L Meonske whose telephone number is (703) 305-3993.

The examiner can normally be reached on Monday-Friday, 8-4:30.

12.     If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Eddie P Chan can be reached on (703) 305-9712.  The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

13.     Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system.  Status information for published applications

may be obtained from either Private PAIR or Public PAIR.  Status information for unpublished

applications is available through Private PAIR only.  For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tlm

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SUPERVISORY PATENT EXAMINER
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